

Fig. 1a

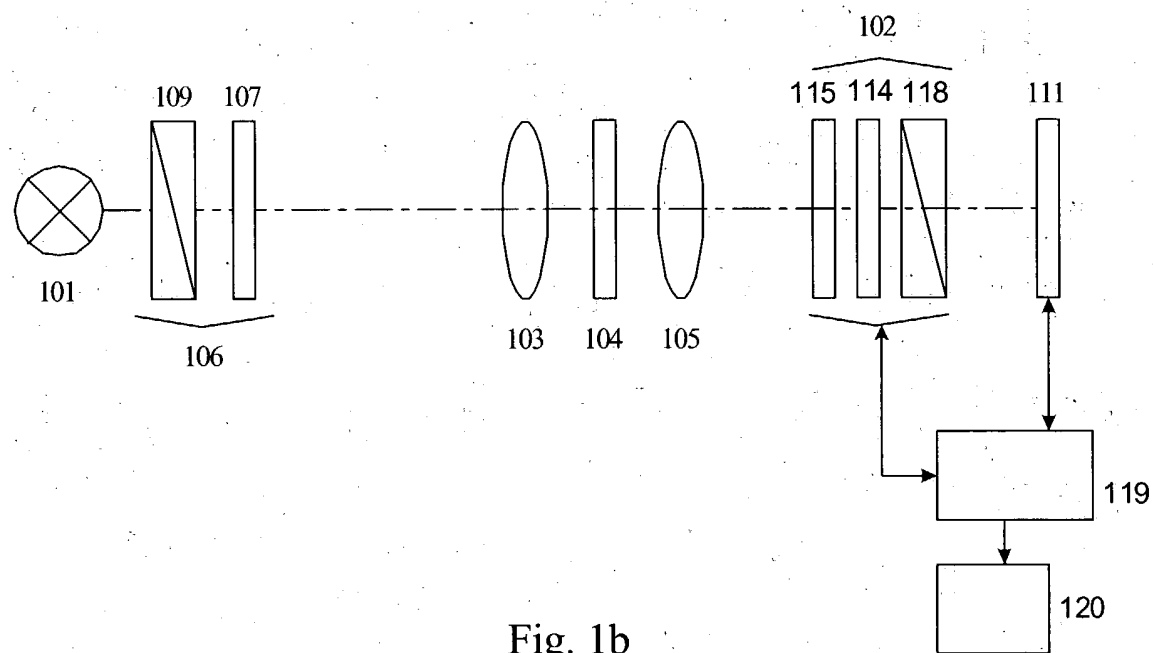


Fig. 1b

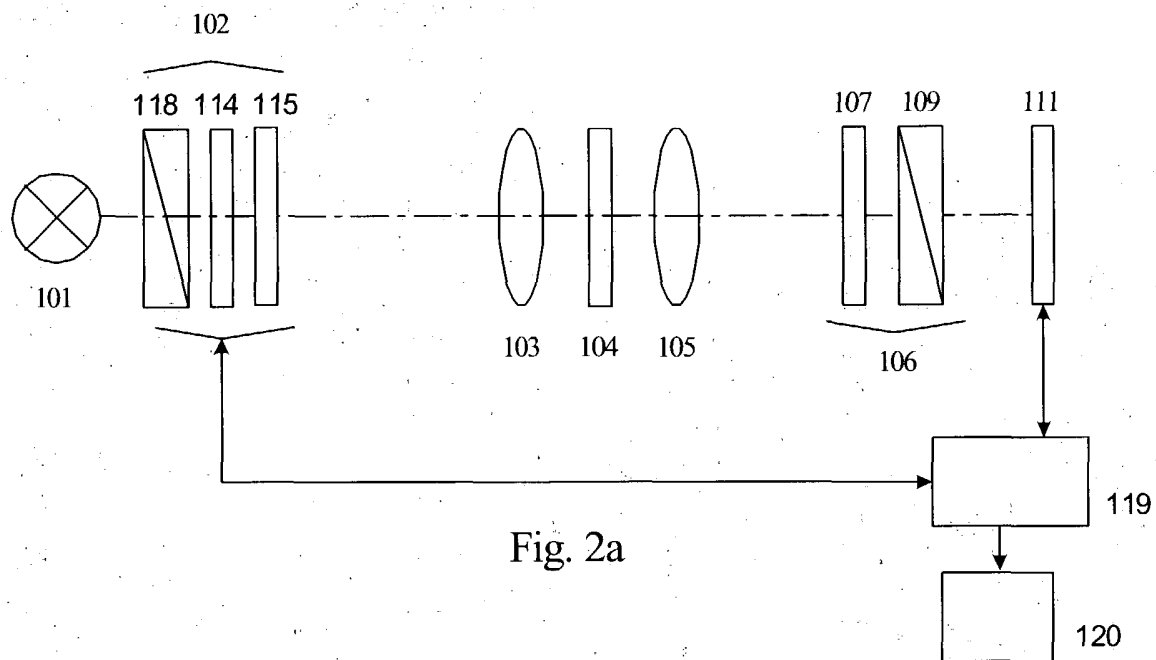


Fig. 2a

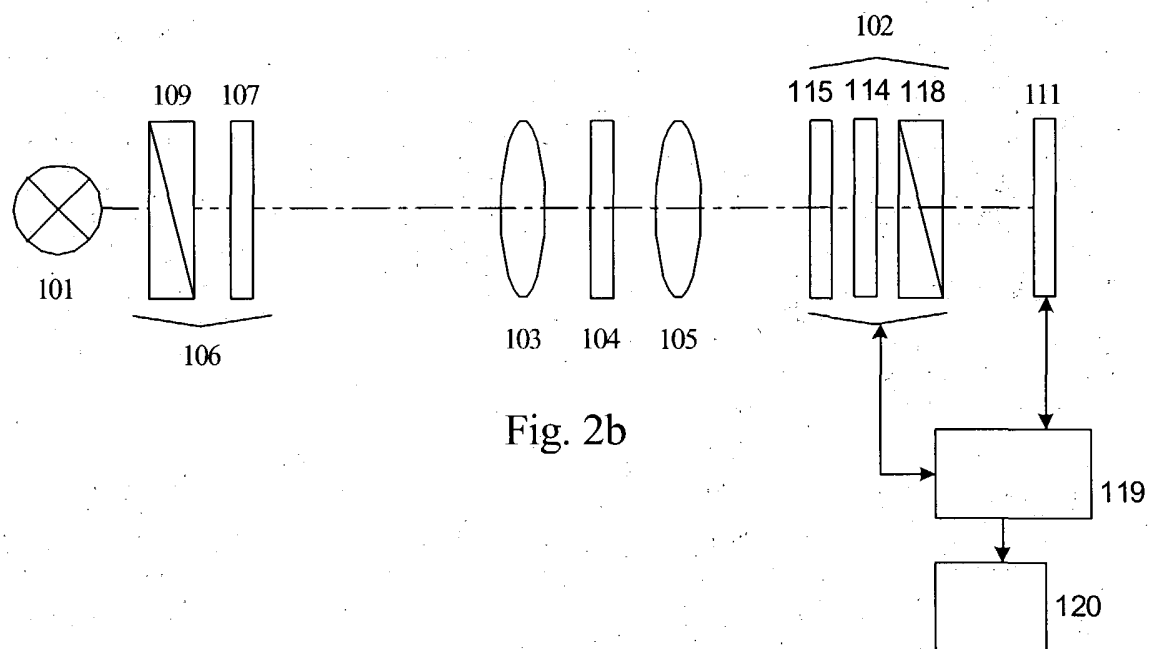


Fig. 2b

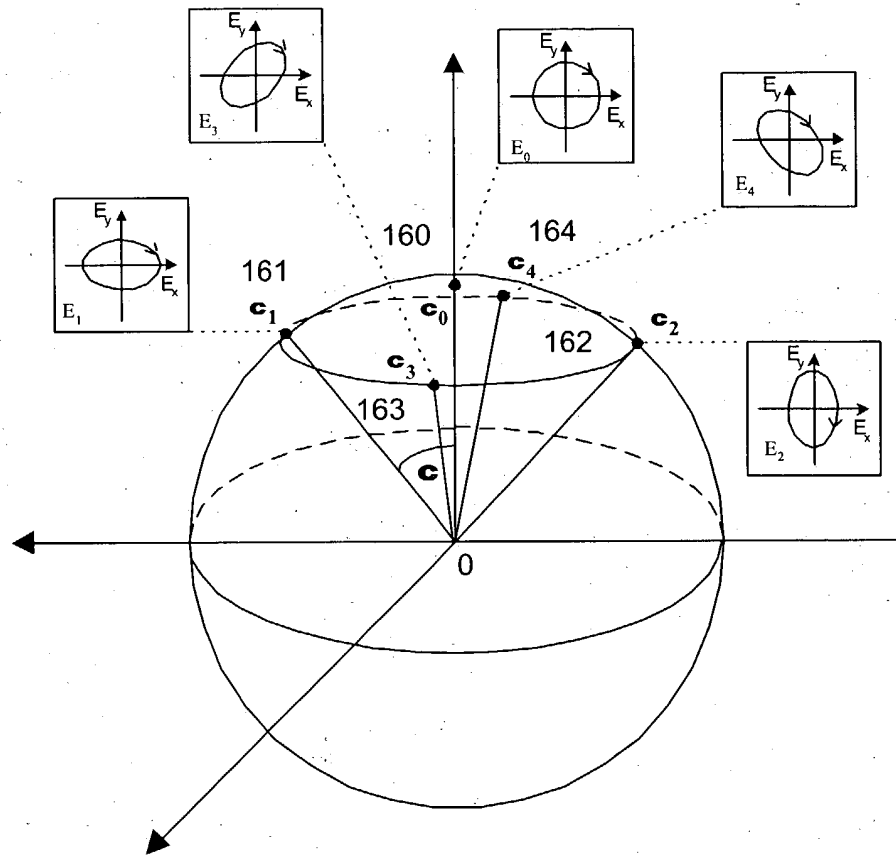


Fig. 3

Setting	Beam parameters		Retardances (Fig 1A)		Retardances (Fig 1B)	
	ε	γ	α	β	α	β
Σ_0	45°	NA	90°	180°	270°	0°
Σ_1	$45^\circ - \chi/2$	0°	$90^\circ - \chi$	180°	$270^\circ - \chi$	0°
Σ_2	$45^\circ - \chi/2$	90°	$90^\circ + \chi$	180°	$270^\circ + \chi$	0°
Σ_3	$45^\circ - \chi/2$	45°	90°	$180^\circ - \chi$	$90^\circ - \chi$	180°
Σ_4	$45^\circ - \chi/2$	135°	90°	$180^\circ + \chi$	$90^\circ + \chi$	180°

Fig. 4

N=2 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE CIRCULAR SETTING OF POLARIZER Σ_0 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG0}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG1}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG3}



TAKE IMAGES WITH SPECIMEN IN

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_1



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_3



COMPUTE TERMS **A** AND **B** FROM $I_1, I_3, I_{BG0}, I_{BG1}, I_{BG3}$



COMPUTE RETARDANCE Δ AND AZIMUTH ϕ FROM **A** AND **B** AND STORE

Fig. 5

N=3 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG1}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG2}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG3}



COMPUTE TERMS A_{BG} AND B_{BG} FROM I_{BG1} , I_{BG2} , I_{BG3} , AND STORE

Fig. 6

N=3 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_1



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_2



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_3



COMPUTE TERMS A AND B FROM I_1, I_2, I_3



COMPUTE CORRECTED TERMS $A'=A-A_{BG}$ AND $B'=B-B_{BG}$



COMPUTE RETARDANCE Δ AND AZIMUTH ϕ FROM A' AND B' AND STORE

Fig. 7

N=4 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG1}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG2}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG3}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG4}



COMPUTE TERMS A_{BG} AND B_{BG} FROM I_{BG1} , I_{BG2} , I_{BG3} , I_{BG4} AND STORE

Fig. 8

N=4 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_1



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_2



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_3



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_4



COMPUTE TERMS A AND B FROM I_1, I_2, I_3, I_4



COMPUTE CORRECTED TERMS $A'=A-A_{BG}$ AND $B'=B-B_{BG}$



COMPUTE RETARDANCE Δ AND AZIMUTH φ FROM A' AND B' AND STORE

Fig. 9

N=5 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

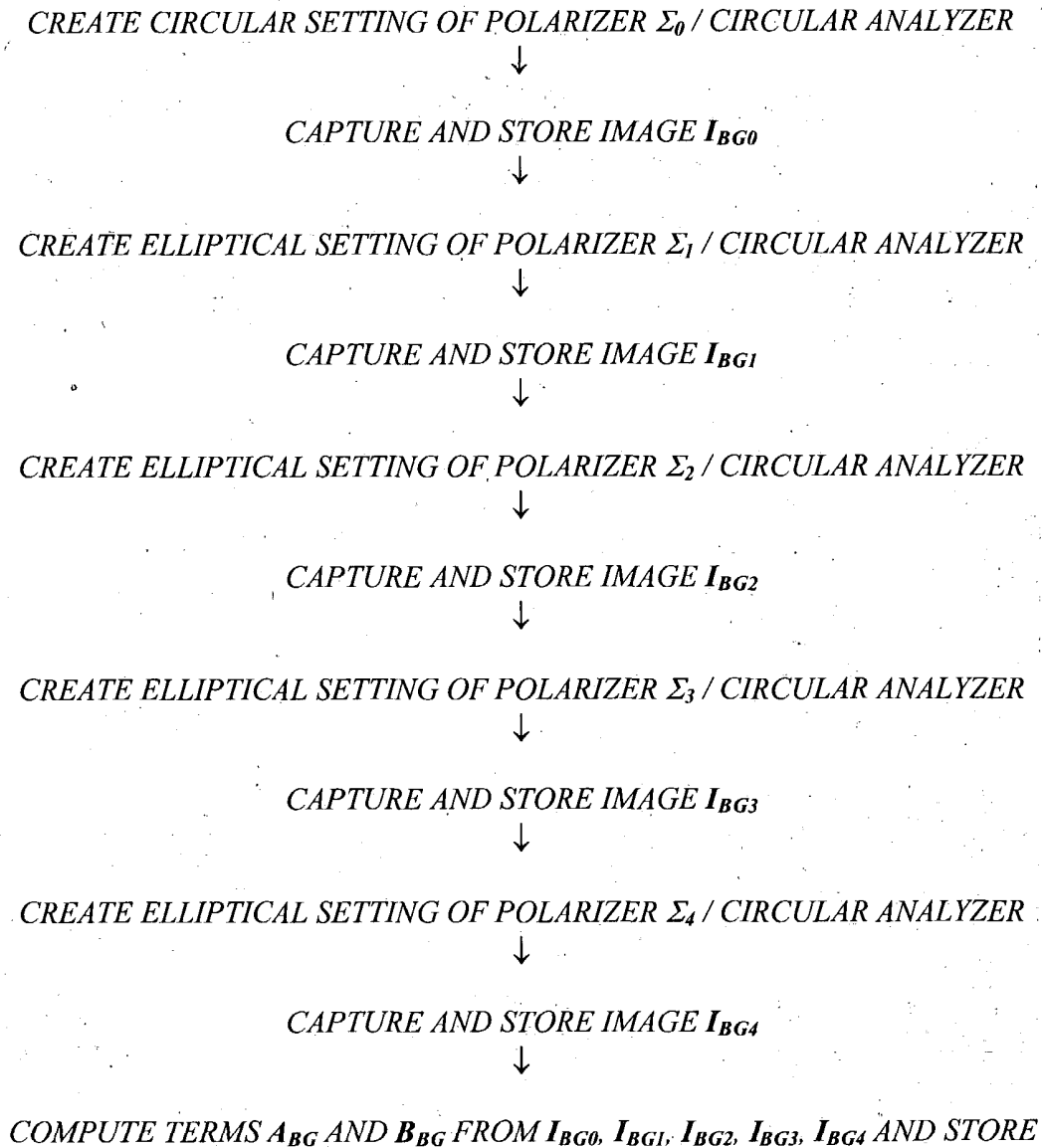


Fig. 10

N=5 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

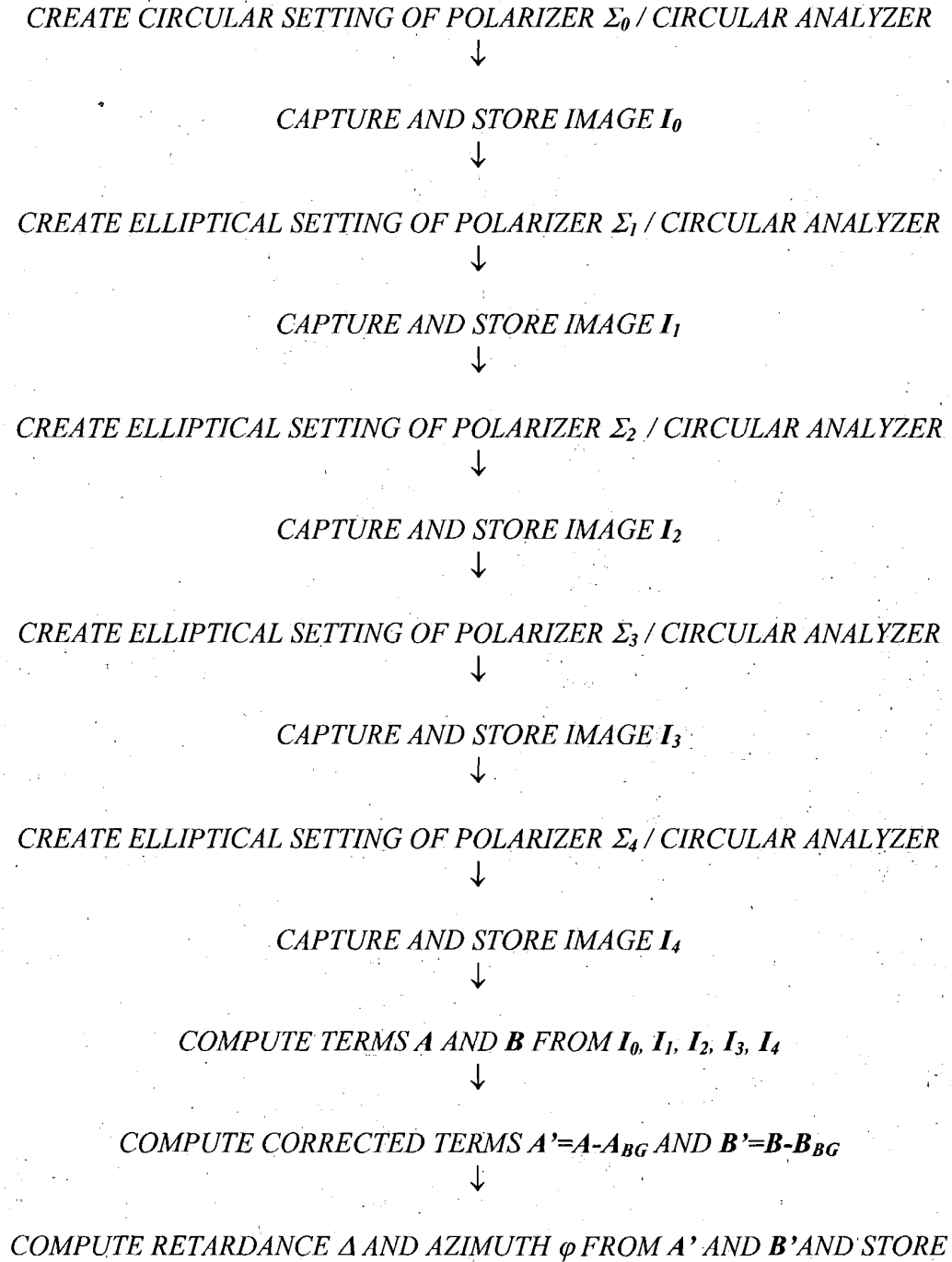


Fig. 11